DOCUMENT RESUME

ED 093 553 RC 008 013

AUTHOR Axinn, George H.
TITLE Function and Dysfunction in Education for Rural Development. An International Survey.
PUB DATE 20 Aug 74
NOTE 23p.; Paper presented at the Annual Meeting of the Rural Sociological Society (Montreal, Canada, August 1974)

EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE
DESCRIPTORS *Academic Achievement; Agricultural Education; Career Education; Change Agents; Dropouts; *Educational Innovation; *Educational Objectives; Growth Patterns; Human Development; *Rural Development; *Rural Education

ABSTRACT

Formal education is a set of learning experiences which are intentionally organized by teachers and learners. Since humanity institutionalizes its organized activity, formal education becomes institutionalized. As the human environment changes over time, to the extent that learning is preparation for living, it too must change. The alternative is to become obsolete and dysfunctional. Formal education becomes organized into grades or steps, each usually the preparation for the next, but most learners do not move through the whole series of steps. Thus, they find the programs of the early stages less than optimal for their particular life preparation. Using data from Indonesia, Nepal, Nigeria, Ethiopia, and similar countries, an alternative system is suggested in which each level is fundamentally preparing for some kind of useful work, possibly a lifelong career--those who succeed in that kind of career may go on to the next level. The door is open for a few to go on directly. It is argued that the "direct door" should not be open as it offers an elitist escape from social responsibility. (Author/NQ)

BEST COPY AVAILABLE

BEST COPY AVAILABLE

NOT FOR DUPLICATION OR DISTRIBUTION
WITHOUT PERMISSION OF THE AUTHOR

Permission granted Aug 23, 1973
P. AL

ED 093553

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

FUNCTION AND DYSFUNCTION IN EDUCATION FOR RURAL DEVELOPMENT

An International Survey*

By

George H. Axinn**

*Prepared for presentation at the Annual Meeting of the Rural Sociological Society, Montreal, Quebec, Canada, 22-25 August 1974.

**President and Executive Director, Midwest Universities Consortium for International Activities, Inc. (MUCIA), and Professor of Agricultural Economics Michigan State University.

RC008013

Not for duplication or distribution
without permission of the author.
Permission granted Aug 23, 1974

FUNCTION AND DYSFUNCTION IN EDUCATION FOR RURAL DEVELOPMENT

An International Survey
By
George H. Axinn

The sad graduate was labeled, "unfit, for being too well fitted in an unfit fitness."

Was it a Nepalese engineer who had a beautifully framed diploma on his wall, and didn't know the first thing about how to build the roads his country so desperately needs? Was it a Peruvian Ministry of Agriculture field professional, who knew less about growing maize than the children on local farms? Was it an American with her new B.A. in Multidisciplinary Social Science, for whom the employment agencies had no category? Or, was it the Nigerian mason, complete with his London City and Guilds Certificate, whose top skill was in building the kind of brick fireplace which was unknown in his tropical paradise home?

What about the drop-outs? What is wastage in formal education? What happened to the hundreds of African school leavers who are unemployed? What of thousands of unemployed in India. . . with certificates?

Is formal education a public utility. . . serving the various societies of this earth? Or, are our school systems monsters, which, having eaten their master, voraciously turn on everything else?

* * * *

Education permeates human life. We look at socialisation as universal and as continuous.

Human life is a series of learning experiences.

Some of these learning experiences are intentionally organised by teachers and learners. These are called formal education.

Humanity institutionalises its organised activity. From a perspective of means and ends, organised means are supported by society, build sustaining relationships and other activities, become normal, are valued in and of themselves. Thus, they become institutionalised. Consideration of the ends for which such means were originally developed becomes less significant over time. Organisational maintenance competes with progress for resources.

Formal education--the organised part of human learning--a small portion of the whole--is a means to an end. That is, in order to make certain learning either more efficient or more effective, or both, it has been organised by society. Like other organised human activity, it tends to become institutionalised over time.

The human environment changes continously. Appropriate learning at any point in time becomes obsolete as time marches on. "Time makes ancient good uncouth."

But means persist while ends become obsolete. Form is developed to achieve function, but form outlasts function. As history proceeds, organisations tend to become decreasingly functional, become entrenched, resist change, become obsolete--but persist.

Some reorganise; some shift program; some shift leadership; some change doctrine and transcend their original institutionalisation to become institutionalised anew. Others become ossified, wither, and die. Still others succeed in resisting change, and persist in non-functional or dysfunctional form through the generations. In the satire, The Saber Tooth Curriculum, J. Abner Peddiwell (Harold Benjamin, 1939) puts this case quite eloquently.

Formal education is not unique among human organisations. Religious organisations, economic organisations, and political organisations exhibit similar patterns of institutionalisation over time. But formal education, like other organized human activity, also has the potential of flexibility, and in any given area may change dramatically from time to time. Sociologists and anthropologists have long focused their attention on such change. (Bascom, 1959 and Becker, 1950.)

Formal education is one of the cumulative achievements of humanity. With the aid of language, the printing press, photography, and now electronics and the computer, it has become an international storehouse of human wisdom, capable of spanning the generations. This, however, has produced highly sophisticated complexities of knowledge and understanding. The system has adjusted to this by organizing a series of graded levels, going from the simple to the complex, from the basic to the applied, and from the practical to the theoretical to the pragmatic again. In the efforts to evolve a series of steps which a few learners might climb, from the primary level through the secondary level to the tertiary level, there has been a tendency to overlook the educational population pyramid, and design each step as primarily preparation for the next, as if all learners would proceed through all steps.

When history demonstrated that only a small portion of those who pass through the first steps of formal education are likely to proceed to the next, different human groups made different adjustments. Some ignored the phenomenon, and continued to use preparation for the next level as the principal goal of each grade. Others split streams, separating the academic from the vocational. The academic were to go on up the educational ladder; the vocational were to utilize education as preparation for the occupations of life. This separation had its pitfalls; among them the human capacity to adjust and to become made it impossible to predict, at any particular level, which learners should follow which streams. A third attempt, the comprehensive school, with both academic and vocational programs, tries to overcome the problem--but the basic assumptions are probably fallacious, and no mechanical reconfiguration is likely to be satisfactory. At the other extreme, a society may be sufficiently pressed to conduct a "cultural revolution"--close the schools entirely, send their participants out into the real world to discover it anew, and then reformalize education.

* * * *

At the root, all education is preparation. None is merely academic, and nothing more. Even the academic is preparation for more academic. For academic occupations, the academic is vocational. For those who will not practice the particular occupation, the vocational is academic.

To summarize briefly, it has been stated that:

1. Formal education becomes institutionalized.
2. As the human environment changes over time, to the extent that learning is preparation for living, it too, must change over time. The alternative is to become obsolete, dysfunctional.
3. Formal education becomes organized into grades or steps, each usually the preparation for the next.
4. Most learners in formal education do not move through the whole series of steps, and thus find the programs of the early stages less than optimal for their particular life preparation.

How To Do Nothing

Formal education is an anomaly of our times, exhibiting a great variety of manifestations in different parts of the globe. Too often it attempts to help students learn that which no one needs to know while failing to teach them how to do that which needs to be done.

For example, there is a "surplus of engineers in Nepal." That is, there is a surplus of individuals with a Bachelor of Science degree in engineering in Nepal. The roads in Nepal and the bridges over which motor vehicular traffic might travel are abysmally weak, poor and inadequate. Unfortunately, the surplus of engineers is unrelated to this problem. Those with degrees in engineering do not know how, and could not show how to build the kind of roads which the country needs. (Midwest Universities Consortium for International Activities, Inc., 1972.)

There is a surplus of "school-leavers" in Nigeria. That is, the cities are filling up rapidly with persons who have gone through secondary school--achieved certain certificates, learned irrelevant material, and find that no one wants to employ them to practice what they have learned. (Calcott, 1968.)

There are inadequate professional agriculturalists all over the world. These young people have had an academic and literary preparation--usually sorting out and eliminating those with an affinity for helping plants grow or keeping livestock healthy--on top of which has been piled a school-book-type of agricultural education. Literary agricultural education selects (not by design, but by natural selection) young men who tend to originate in urban places, tend to have an affinity for words and numbers, and tend to have no practical experience doing any work with their hands, (tend to have been better than their fellows at rote memory, and tend to have been better than others at passing the paper and pencil examinations). But this formal education system from which agriculture selects its entrants is generally the same formal education system from which medicine, law, and the clergy select their entrants. And because medicine, law, and the clergy tend to be the preferred professions for those who climb the scholastic ladder with professional goals in view, the better students in the formal system enter these professions. For those who are not quite as good at passing the paper and pencil tests, there are the academies for government service, or engineering, business administration, or the profession of formal education itself.

Finally, there is the group that got through most of the academic screen, but didn't do it well enough to be selected for one of the higher status and more desirable fields for further formal education. For them there is agriculture. These individuals fill the world's ministries of agriculture, but tend to despise the tillers of the soil, and tend to be inept and incapable of helping them increase their production or make their marketing of food and fiber more efficient.

School dropouts, indentified as "wastage" in many educational studies, leave the system in part because it is not teaching them anything they need to know. And university students, sensing a similar deep feeling of frustration parade and demonstrate and even turn to violence, while a surprisingly high proportion of their professors lecture from stale notes on absurd matters of inconsequentiality.

Many leaders of education have recognized the problem and a ferment of change permeates some educational systems.

For example, President Aklilu Habte of Haile Sellassie I University in Ethiopia made this statement in a special report (1969:13): "We must continually make clear the university's commitment to the values of sacrifice, service, work and greater social justice. This is a commitment of individuals, of teachers and students alike. We must avoid the danger of fostering the wrong kind essentially selfish, individualist, 'elite' attitudes which may have begun to characterize some other universities in the developing world. It is simply wrong, in my view, for staff and students to be preoccupied with white-collar, status-oriented, high salary jobs. Development means hard work--labor, on the farms, in health stations, in construction, in

factories, and in schools; higher education must more strongly emphasize the dignity of labor, the value of achievement through manual work as well as other work.

"Our educational philosophy must be innovative, not imitative. We must learn--though it is sometimes hard to teach the lesson to some university teachers--that valid education is not simply a process of amassing course credits according to some preordained curriculum; nor is education always fostered by listening to didactic lecturers and acquiring information. The experience which constitutes a 'higher education,' in Ethiopia at least, should include extensive work in the field, notably in the country's less-developed rural areas, but also in government offices, businesses, hospitals, wherever the hard problems are. The experience must aim at developing more self-reliance and initiative, and in particular, capacities to work out problems in disciplined, practical ways."

In 1970, Nepal developed a new national education system plan for 1971-1978. That plan recognized the following serious deficiencies: education policies and objectives not well-defined, past educational philosophy based on unproductive social values, educational system unrelated to national development, the lack of consolidated educational institutions, educational wastage, and the educational system not being action-oriented administratively. Speaking of this new plan, one of its primary architects, Dr. Mohammed Mohsin (1971:183-184) said: "The overall objective of the new plan is to revamp the inherited system of education in the country and transform it into a potent and effective mechanism to synthesize diverse socio-economic interests, negotiate ethno-lingual heterogeneity and convert the geopolitical entity of Nepal into a well-knit dynamic modern nation. With a view to achieve these objectives,

the plan makes provision for the expansion of primary education, homogenization of the primary curriculum, standardization of educational courses facilitating their effective linkage with the manpower needs of a national plan."

But he went on to say, "But, it would be too naive to claim here that the mere approval of the Plan or the legislative provision to impart legitimacy to it alone would be enough to make it operational and effective. The initiation of a change or the promulgation of a reform, however timely it may be and useful it may be and useful it may look like could not change the status quo per se nor could it take the new system any further in the desired direction. For the inherited system of education does not operate in a state of flux or in a vacuum. It is sustained by established institutions and enforced by elaborate regulations. Besides, it has the advantage of being known by and familiar to its clientele group. Also, it commands the allegiance of those who operate it and draw sustenance by serving it. These are, indeed, the agencies and groups that generally find themselves threatened by the new change and hence, are found resisting it in the most. In cognition of these facts, the education plan undertakes to reconstitute the existing educational system by redefining its role, orientation and the modus operandi."

With a similar thrust, the following words appear in the 1966-1967 calendar of the University of Nigeria (1966:10) under the heading, The Philosophy of the University:

"In the spirit of the essential purposes of all great universities since the dawn of man's struggle toward universal human dignity, the basic objectives of the University of Nigeria are: to seek the truth, to teach the truth, and to preserve the truth.

". . . the goals of the University of Nigeria go beyond those of education for its own sake. This seat of higher learning is committed to play a dynamic and vital role in the significant task which faces the country of which it is a part--that of building a great new nation.

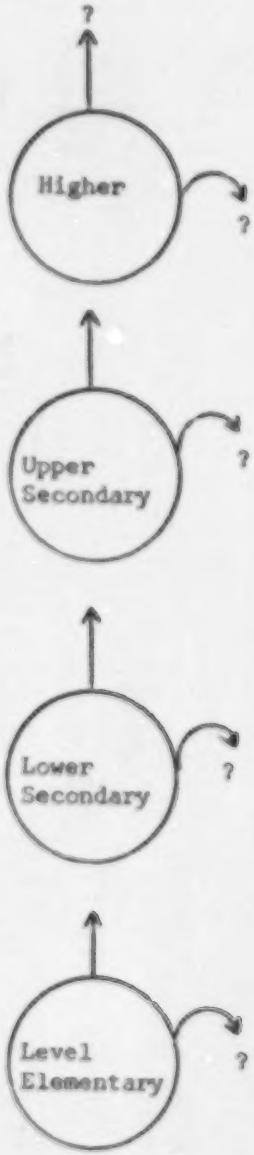
"Thus, the community of scholars--teachers, students, and researchers--who have gathered themselves on the plains of Nsukka have launched a venture in higher education that is somewhat different for this part of the world. They are attempting to sift out the most appropriate aspects of traditional universities, and by blending them into the Nigerian scene to evolve a program specifically suited to the needs and interests of the people of Nigeria, as they take their rightful place in the world community of nations."

An Alternative Model

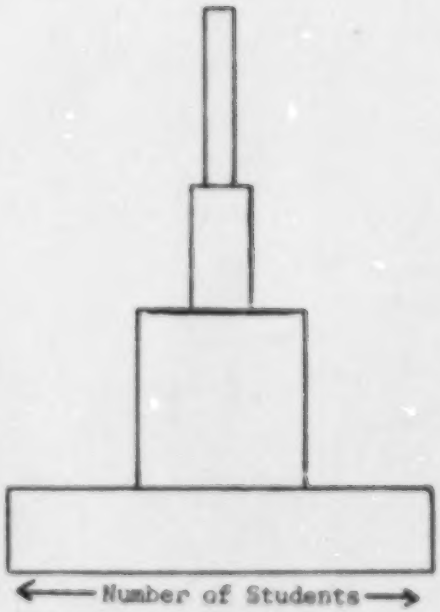
These efforts at reform of higher education cannot solve the problem. Higher education alone is merely one component in an interrelated system. Neither will the addition of more realistic "non-formal" components to an irrelevant system, as some are currently advocating. (Coombs, 1973.) Change is more likely to occur if it is attempted throughout the formal and non-formal education system. The early years of formal education are crucial. An appropriate goal is a system to which each level prepares learners for a useful life occupation, geared to the appropriate tasks of their age-grade; and, at the same time, leaves the door open to the next higher level. Diagrammatically, it can be contrasted with the conventional system. See Figure I.

FIGURE I

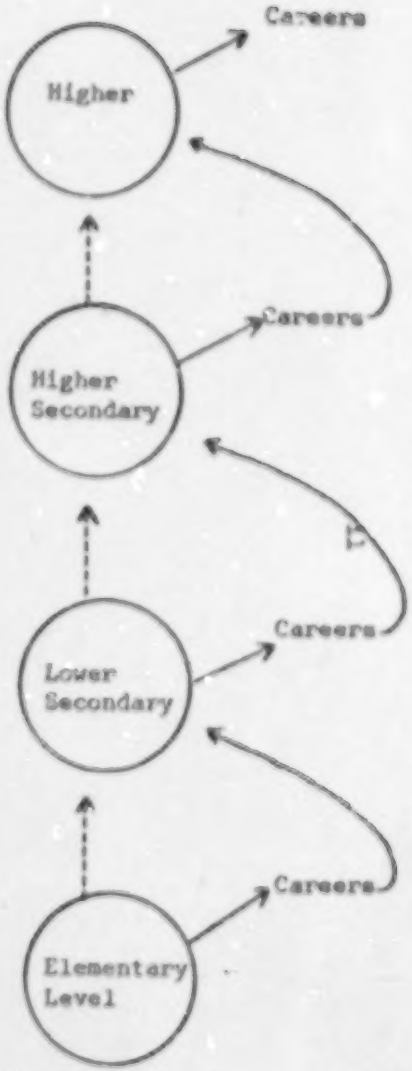
ALTERNATIVE MODELS OF EDUCATIONAL SYSTEMS



Conventional



The Typical
Educational Pyramid



Alternate System

In the conventional system, each level is fundamentally preparation for the next level. "Dropouts" see themselves as failures, have learned little that is useful, and constitute the bulk of those who enter the system. (Coombs, 1973.) In the alternative system, each level is fundamentally preparation for some kind of useful work, possibly a life-long career, but at least the first step in that direction. Those who succeed in that kind of career may go on to the next level--and the door is open for a few to go on directly. It can be argued that the "direct" door should not be opened, as it offered an elitist escape from social responsibility. It may then be unwise strategically to allow that door until the unconventional system has been institutionalized.

Both systems acknowledge a typical educational pyramid in which the largest number of students are at the bottom level--and increasingly smaller numbers are found at each succeeding higher level.

With the conventional system, dropouts at each level are labeled, "wastage." They become a vast army of unemployed--and may not be employable. They have had an irrelevant education. They have learned how to do that which does not need to be done. One such person is a surplus.

With the alternative system, most, if not all learners are expected to leave the system at each level. Whenever they leave, they should have learned how to do something which needs to be done. By definition, they cannot be in surplus. And if the system is functional, only those who demonstrate their productivity in the world outside formal education might be allowed to go on to the "higher" levels of formal education.

The conventional system perpetuates the "dual society" as described by Edgar Owens and Robert Shaw in Development Reconsidered. (1972.) The alternative allows the development of a "modernizing society."

The emphasis in such a system is on the practical and applied, rather than on the pure and literary. This is a matter of teaching and learning style, and the perspective of education, rather than the fundamentals of knowledge. That is, learning can proceed around the practical, bringing in the basic principles whenever they are useful as aids to thinking or guides to action. This is quite different from approaching the principles as goals, and utilizing the practical applications as examples to enhance the theoretical learning.

Agricultural education provides an illustration of this difference in approach. A typical student will do the pure science kinds of things first. He will start with mathematics in school going from arithmetic to algebra and higher forms of mathematics. Sometime along the way, he'll begin biology and perhaps follow this with more specialized botany. At the same time he may study chemistry and physics--following those with subjects like geology before being allowed to study soils and then agronomy. Still later, he will come to the field crops and horticultural crops--and then finally--perhaps in the final year of a Bachelor of Science program in agriculture he will learn how to do soil tests--that is, he will learn how to take samples of soil and put them through chemical reactions in order to predict what additional plant nutrients should be added to enhance the growth of certain types of crops.

An alternative to this system in an agrarian society would be to reverse it completely. That is, in the early years of school, children could learn how to make simple soil tests. They could learn how to collect soil samples, expose them to certain chemicals, and read the reactions in terms of what fertilizers in what quantities are appropriate for which particular crops which may be grown on their home farms. This can be done at first or second grade level Some mathematics would have to be brought in along the way--but that could be as an adjunct to the learning of the soil test--rather than as a central goal. In intermediate years, students could be exposed to more information about the horticultural and field crops and about the nature of the soil. Later on, they can begin learning principles of agronomy and principles of geology--and still later, deal with more academic subjects like chemistry and physics and botany, utilizing the foundation of the basic information they have gathered at earlier stages.

This is not only possible, but highly desirable. A similar model could be utilized not only in agriculture but in engineering education, in health and medical education, and in many other fields.

Content and Style

One paramount set of alternatives is found at every level of the education system. It is the choice between the "practical and applied," on the one hand, and the "pure and literary" on the other.

If agricultural education is taught from a pure and literary posture, then emphasis will be on meeting a set of artificial academic standards. Agriculture students will acquire skill in manipulating symbols rather than the skills of helping plants grow or tending livestock. But this is the easy way. Textbooks can be imported from abroad, the content needs no local relevance, and progress can be measured by borrowed standards. The main goal at each level is to prepare students for the next level. Such a system is not likely to have much impact upon rural development in the country where it is found because the people employed by rural development agencies and organizations are neither able nor willing to carry out the missions of these agencies. But that question does not arise with this approach. Paper credentials become the measure of the system.

The alternative is much more difficult. The alternative is much more expensive in terms of human creativity. The alternative is usually condemned by worshippers of the outmoded standards of conventional systems.

The alternative is to make agricultural education practical and applied. The alternative is to measure achievement on the basis of the applications of agricultural knowledge to increase productivity--to availability of higher quality foods at lower costs to ever-increasing numbers of people. Success is judged by the utility of what is learned, not by the type of package in which it is dispensed.

But this alternative cannot be achieved by import. Even textbooks and professors from abroad cannot deliver this type of an agricultural education.

Practical and applied agricultural education requires courses with names like rice production, wheat production, and growing poultry--not courses with names like physical chemistry, plant taxonomy, and animal physiology. The principles must be included, of course, but they should be selected insofar as they relate to the production and marketing of the food crops and the livestock of the place where the education is being carried on. This means designing the curriculum--each course, and each lecture or laboratory exercise--to use local examples, data, and case materials. It takes time. It requires local research. It requires the teaching staff to interact with farm people and professional practicing agriculturalists. It requires amendment and localization of textbooks and lectures. It requires acknowledgement that a man with a hoe in his hand, bending his back over a piece of land, perhaps terraced by his father's father, may know more about how to grow rice on that hillside than the professor with his Ph.D., and the professor must be humble in his presence, and listen carefully.

The pure and literary can be carried out in any building. The practical and applied requires land where learners and teachers may grow crops together, and tend to livestock. The "high-priced" essentials are not physical things--the real difficulties usually lie in the attitudes of staff, students, and those responsible for the policies, plans and their implementation.

The staff of an institution focused on the pure and literary needs only technical knowledge. A staff which takes the practical and applied approach must have appropriate skills and abilities as well as high technical knowledge.

In the pure and literary, successful students are qualified for further study. In the practical and applied, successful students will have ability and willingness to participate actively in the country's system of services to agriculture, in addition to their preparation for further study.

Approaching formal education from the practical and applied is not unique to agriculture. Fields such as human health and medicine, engineering, business administration and others--even teacher prepration--might better be approached in this style. The training of para-professionals becomes an integral part of each educational stream.

And what does it promise compared to the more traditional approach to formal education. Here's what it promises--using the agricultural example again--to practical and applied alternative promises a generation of scientific agriculturalists, who understand the plants and animals of their country, and how to make them flourish. But the cost--at least in terms of commitment--is high. The pure and literary alternative costs much less. It can be done by less adequate staff with little localized training. Textbooks can be purchased abroad, and no farms, laboratories, or applied research would be needed. And what does it promise? It offers a generation of well-dressed graduates who can sit behind the desks of various government departments and pass each other reports on the declining production of the "peasantry."

The same may be said in medical education. . . a generation of well-dressed doctors who cluster around the scientific, the equipped teaching hospitals of the capital city and are neither willing nor able to deliver health care to diseased masses of rural people. In engineering, a similar group of "white-collar professionals" who can staff the Ministry of Works bureaucracy, but are

familiar with neither the tools nor the workers on a typical road construction job, and have nothing to offer in application of man's scientific knowledge to increasing the life or the utility of that road, or to decreasing its cost.

But a practical and applied education which over-emphasizes the vocational, and stresses only the how-to-do-it--without providing for higher levels of inquiry--is also deficient. The very style of teaching and learning as Carl Rogers (1952) pointed out can enhance the learning and the development of the whole man.

After graduation from the College of Agriculture at Cornell University in 1923, and then a successful career operating a dairy farm in a rural part of the U.S.A., William J. Wigsten said, "You don't have to go to college to learn how to farm, but you do need to go to college to learn how to live."

The basic utility of education, and even higher education, should not be confused merely with vocational preparation. The appreciation of history, art, music, and the variety of human cultures--even for those preparing to be farmers or medical doctors--can be as essential as any other part of formal education. In fact, general education in the physical or social sciences can be crucial in the preparation of people for many different life roles.

On the other hand, if masons in Nigeria must first learn to make brick fireplaces in order to acquire their London City and Guild Certificate--so they can practice their trade in Nigeria--they have learned how to do that which doesn't need to be done. If agriculturalists in Nepal devote 100 percent of their preparation to learning chemistry, physics, botany, and zoology--they have learned that which is relatively useless and fail to learn that which they need to know.

If homemakers in Okinawa are taught how to make North American biscuits, using ovens they must construct for the purpose and expensive ingredients from outside markets, and fail to learn how to balance a diet of local food for their children, they have learned the irrelevant and missed the crucial! If hundreds of Indian engineers have the B.Sc. degree in engineering, but they have neither the willingness nor the ability to build the roads, dams, and power systems which their country desperately needs, they have learned to do that which doesn't need to be done, and have failed to learn how to do that which needs to be done! An educational system which commits such crimes is dysfunctional, and should be changed.

The place to begin, as John Dewey (1963) shouted at the "unhearing walls," is with the students where they are. This presses the compelling need to explore the learners and discover the appropriate content and process, as the author has pointed out elsewhere. (Axinn, et.al., 1973 and Axinn and Kieffer, 1973.) It calls for deep respect by the "teachers" for the learners, in the sense that Martin Buber specified, "I and thou."

The People's Republic of China used drastic measures, recently, but achieved rapid change in the direction of educational utility. The U.S.A. did a similar thing with its so-called "Land Grant" colleges in the latter part of the 1800's, but much more gradually.

The functional utility of education--formal and non-formal--is not limited to the "work-oriented." The Indonesian Agricultural Faculty which teaches its students the science of agriculture, but fails to open doors to the rich history

of the Indonesian islands and the impact of time on their religions and cultures also misses an opportunity. Education can be relevant and useful, practical and vocational, and at the same time serve as preparation for a full life of a whole person. Anything less is unworthy!

REFERENCES

1. Axinn, George H., et.al. 1974. Toward A Strategy of International Interaction in Non-Formal Education. Study Team Report. Michigan State University, East Lansing: International Studies and Programs.

2. Axinn, George H. and William J. Kieffer. 1973. "Modes of Intervention." Program of Studies in Non-Formal Education Discussion Papers No. 3. Michigan State University, East Lansing: Program of Studies in Non-Formal Education.

3. Bascom, William R., and Melville J. Herskovits. 1959. Continuity and Change in African Cultures. Chicago: The University of Chicago Press.

4. Becker, Howard. 1950. Through Values to Social Interpretation. Durham, North Carolina: Duke University Press.

5. Calcott, David. 1968. "Background and Scope of the School Learner Problems: A Proposal for Re-Education for Rural Employment" in A New Peace Corps for A New Nigeria, pp. 124-146, S. A. Carradine and P. A. Flynn (eds.). Ibadan, Western State of Nigeria: Peace Corps.

6. Coombs, Philip H., et.al. 1973. New Paths to Learning for Rural Children and Youth. U.S.A.: International Council for Educational Development.

7. Dewey, John. 1963. Experience and Education. New York: MacMillan Publishing Company, Inc.

8. Habte, Aklilu. 1969. A Forward Look. Addis Ababa, Ethiopia: Haile Sellassie I University.

9. Mohsin, Mohammad. 1971. "The New Educational Plan and the Institute of Higher Learning: a profile," in Seminar on Institution Building and Development, Paper No. 1, pp. 163-171. Kirtipur, Kathmandu, Nepal: Centre for Economic Development and Administration.

10. Midwest Universities Consortium for International Activities, Inc. 1972. Higher Education in Agriculture in Nepal, The Report of a Pre-Feasibility Study. East Lansing, Michigan: MUCIA.

REFERENCES

11. Owens, Edgar and Robert Shaw. 1972. Development Reconsidered. Lexington, Massachusetts: D. C. Heath and Company (Lexington Books).

12. Peddiwell, J. Abner (Harold Benjamin). 1939. The Saber-Tooth Curriculum. New York: McGraw-Hill Book Co., Inc.

13. Rogers, Carl R. 1952. "Personal Thoughts on Teaching and Learning." Remarks presented as a basis for discussion in the Harvard Conference on "Classroom Approaches to Influencing Human Behavior."

14. The University of Nigeria. 1966. The University of Nigeria 1966-1967 Calendar. Port Harcourt, Nigeria: C.M.S. (Nigeria) Press.